Cancer Incidence in Louisville Metro 1996 - 2000

A Report From:

Louisville Metro
Health Department

University of Louisville
School of Public Health
and Information Sciences

and the Kentucky
Cancer Control Program

LOUISVILLE, KENTUCKY

LOUISVILLE METRO HEALTH DEPARTMENT

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Director

Greetings to the readers of this report,

This is a preliminary report offered to the people of Louisville Metro in order to inform them about the availability of cancer data. This availability arrives with the opening of a new School of Public Health and Information Sciences at the University of Louisville, the expanding cancer control activities of the Kentucky Cancer Program, and the partnership with the Louisville Metro Health Department. Included here are model data analyses regarding cancer incidence in Louisville, by zip code.

Our hope is that this report will provide encouragement about one's opportunity for reducing his or her cancer risk. There are many factors contributing to cancer risk and the response to treatment after cancer is detected. Two important areas are early detection of cancer with screening and improving Metro residents' access to state-of-the-art cancer treatment. Personal risk factors such as diet, activity level, smoking habits and other life style patterns may influence cancer risk. Finally, concerns for the quality of our ambient environment represent a prominent Metro area consideration. We encourage readers of the report to call upon the listed resources for additional information regarding the patterns of cancer incidence in Louisville Metro.

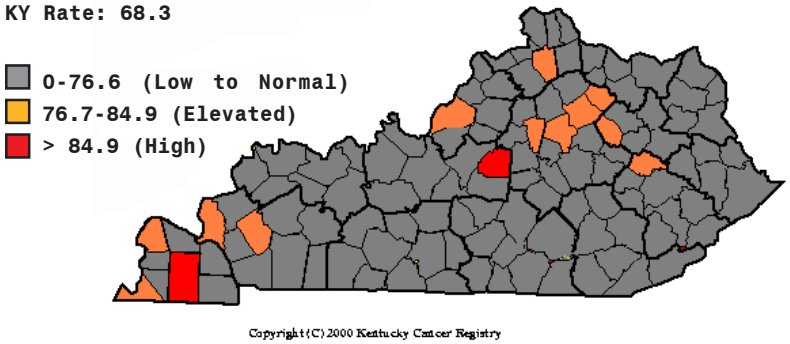
Sincerely,

Adewale Troutman

Adewale Troutman, M.D., M.A., M.P.H.

Breast Cancer Incidence, 1996-2000
(Rates per 100,000 population)

US Rate: 73.6*
KY Rate: 68.3

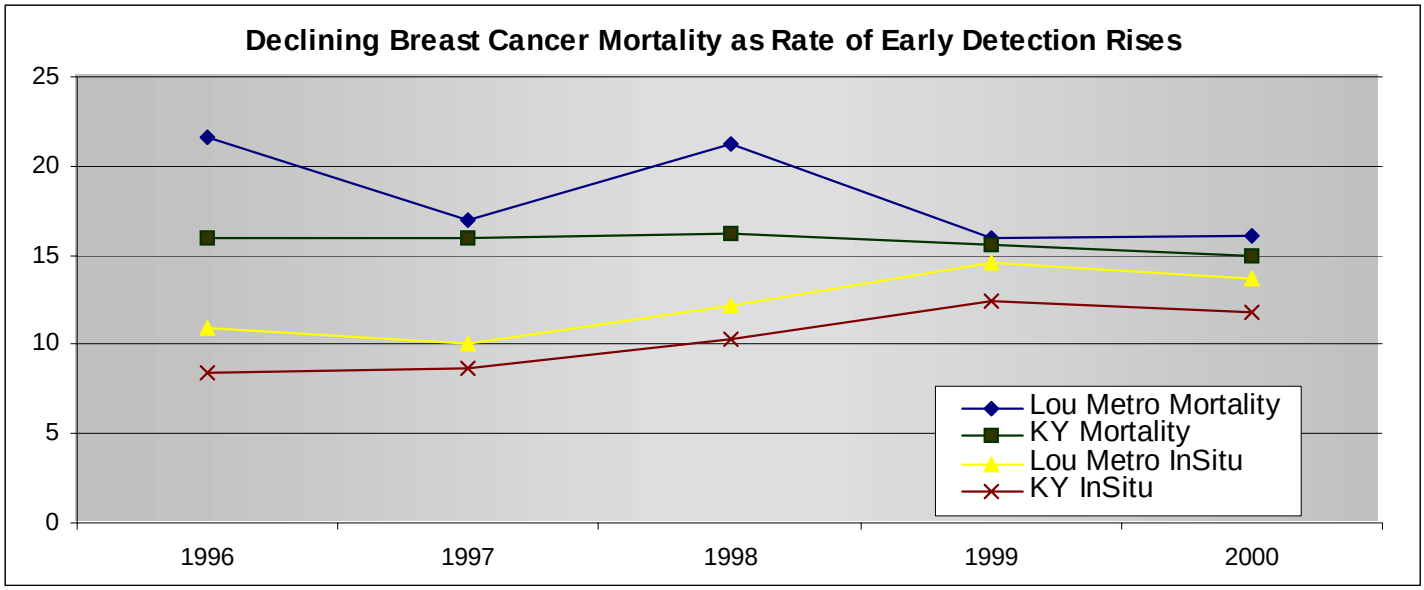


No Evidence of Clustering

* Estimate based on Surveillance Epidemiology and End Results (SEER) data

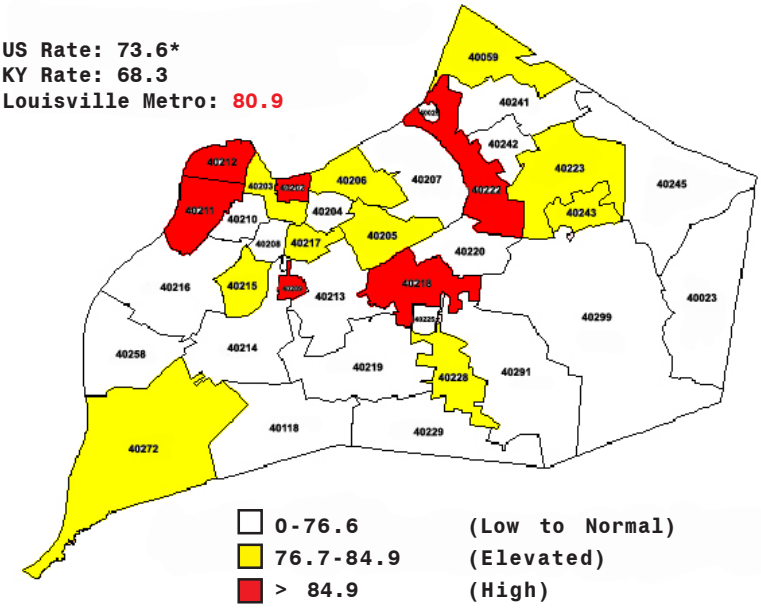
BREAST CANCER: An Example of a SCREENING SUCCESS

This report begins with breast cancer, an example of success through the reduction of mortality from cancer with early detection. During the period of 1996 to 2000, mortality from breast cancer in Louisville Metro decreased to a rate similar to the state rate.



Breast Cancer Incidence, Louisville Metro, 1996-2000
(Rates per 100,000 population)

US Rate: 73.6*
KY Rate: 68.3
Louisville Metro: 80.9

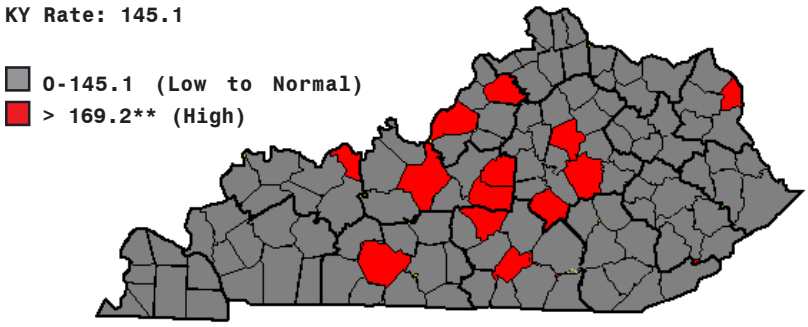


The earliest stage of breast cancer is called *in situ*; Louisville Metro has consistently diagnosed a higher rate of these very early breast cancers, than has the state.

Within Louisville Metro, there are ZIP codes with higher breast cancer incidence rates than others. These areas do not suggest any particular pattern.

Prostate Cancer Incidence, 1996-2000
(Rates per 100,000 population)

US Rate: 172.8*
KY Rate: 145.1



* Estimate based on Surveillance Epidemiology and End Results (SEER) data
** Two Standard Deviations

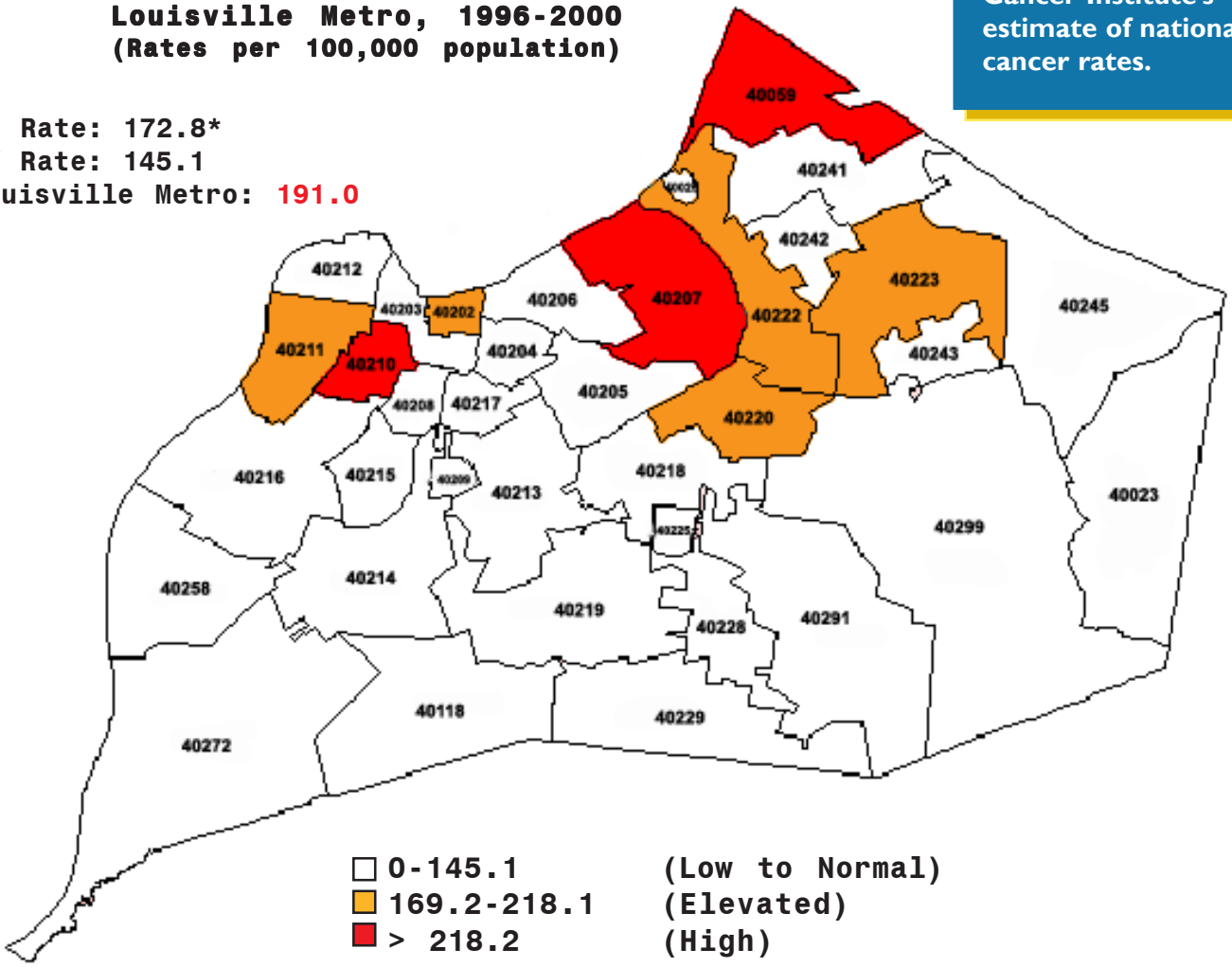
PROSTATE CANCER:

Prostate cancer is another cancer, just as breast cancer, where Louisville Metro's rate is higher than the rest of the state, in this instance significantly so. Men of all races have rates that are greater than their respective Kentucky rates. Within Louisville Metro, the higher incidence rate ZIP codes are not clustered.

SEER is the acronym for Surveillance, Epidemiology & End Results, the National Cancer Institute's estimate of national cancer rates.

Prostate Cancer Incidence, Louisville Metro, 1996-2000
(Rates per 100,000 population)

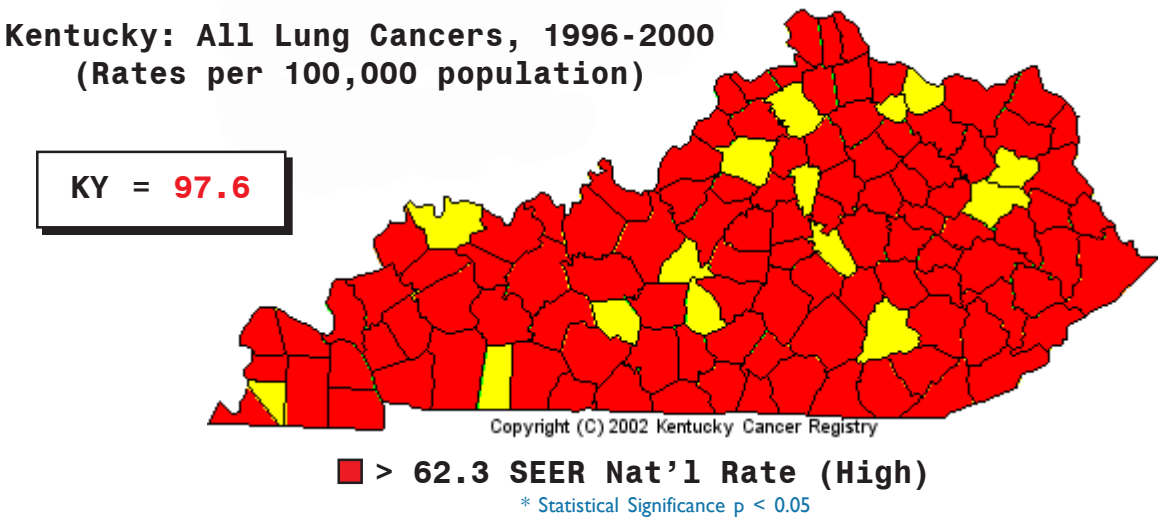
US Rate: 172.8*
KY Rate: 145.1
Louisville Metro: 191.0



African American mortality rates are nearly twice the magnitude of the Caucasian rates. This is also a state and national trend. However, in Louisville Metro the early detection rates are nearly the same for both races.

Lung Cancer:

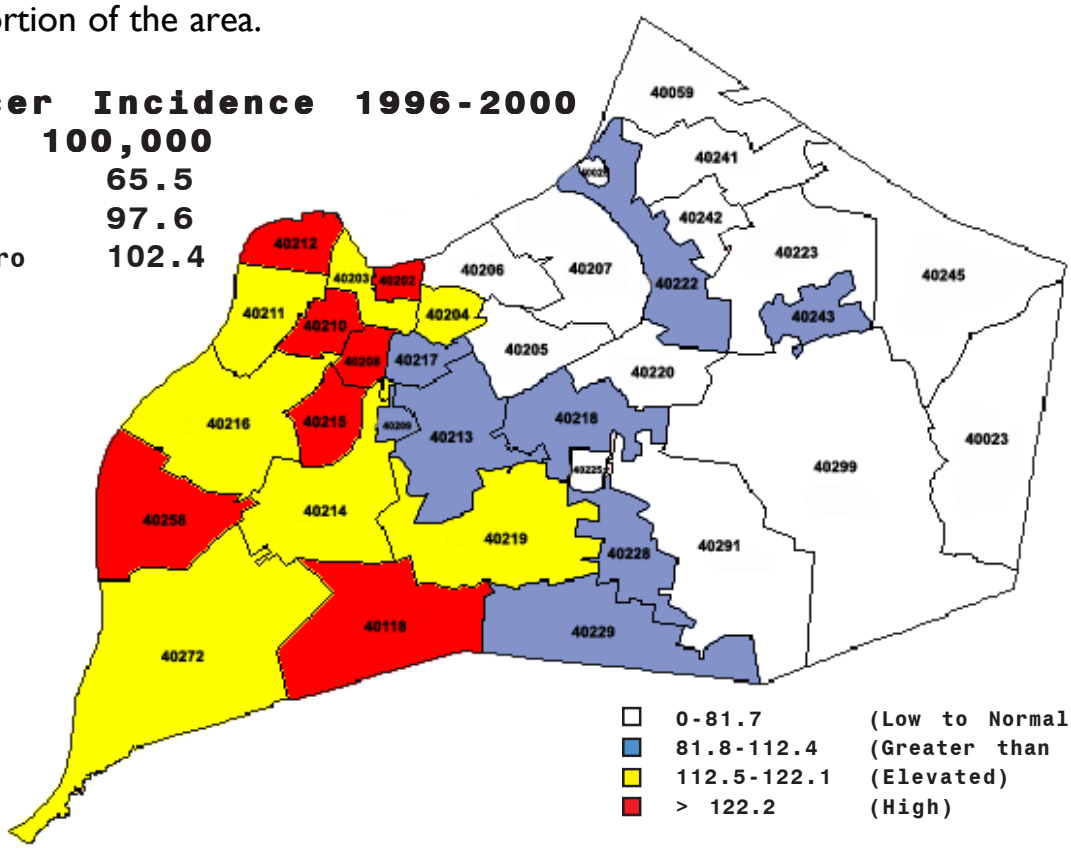
The foremost cancer control priority in Kentucky



Louisville Metro's lung cancer rates are significantly greater than those for the state, and the nation. The communities [ZIP codes] with higher lung cancer incidence rates are aggregated in the western portion of the area.

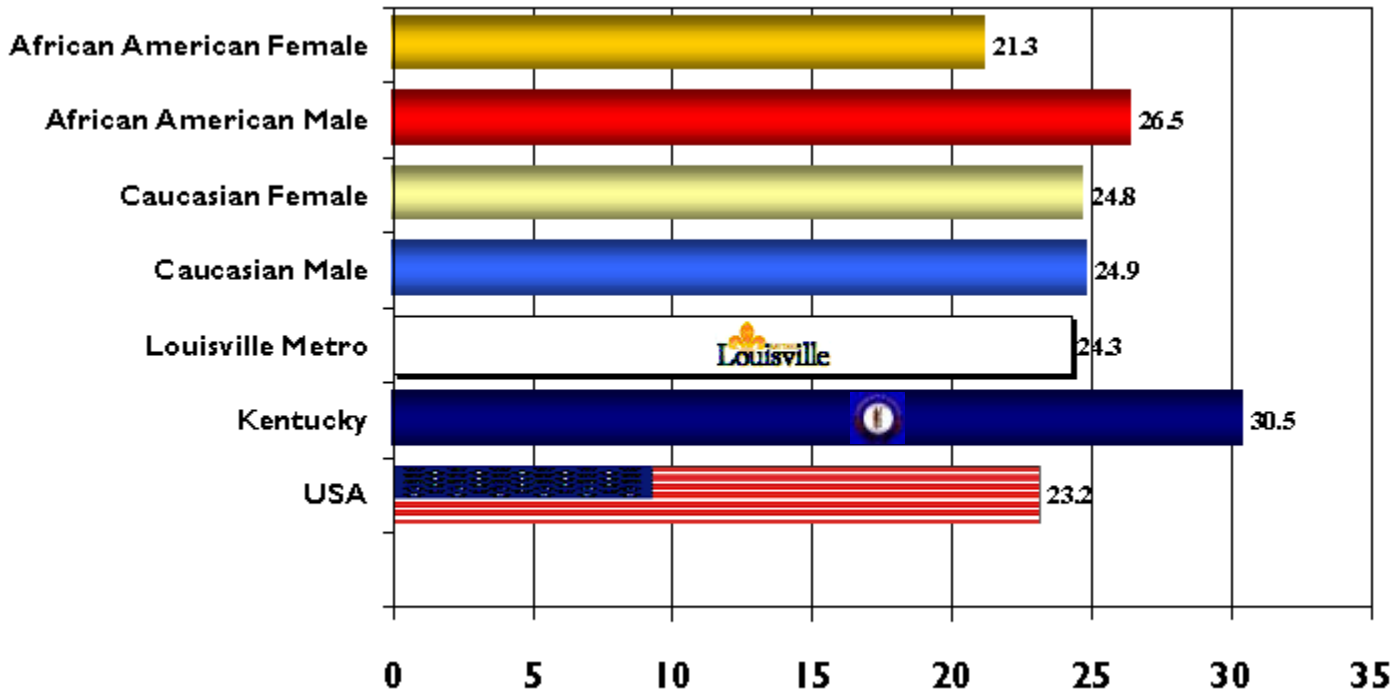
Lung Cancer Incidence 1996-2000
Rates per 100,000

SEER	65.5
KY	97.6
Louisville Metro	102.4

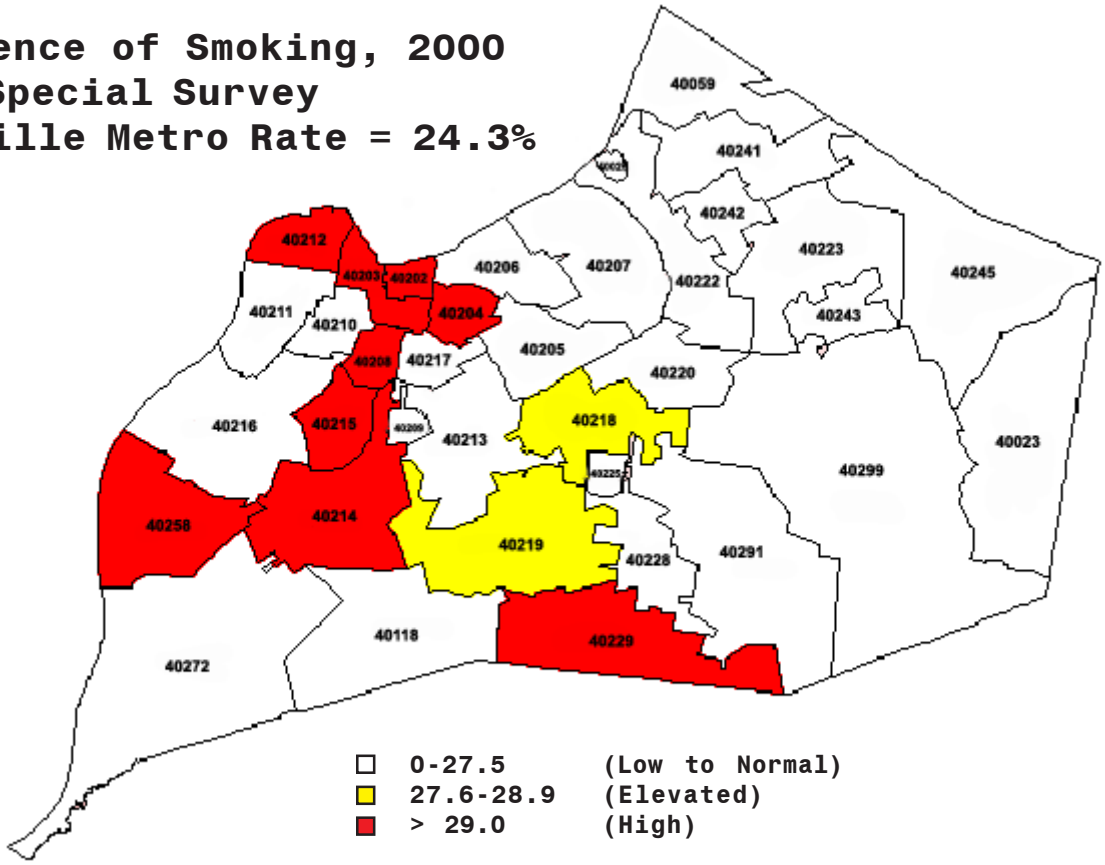


Smoking rates vary by race and gender groups within the Metro area. Overall Kentucky has the highest smoking rate in the nation. The current areas of higher smoking rates (see next page) overlap with the areas of higher lung cancer rates. Some of the increased lung cancer incidence may be due to increased smoking rates.

Affirmative answers to "Are you currently smoking?" (Louisville Metro 2000)

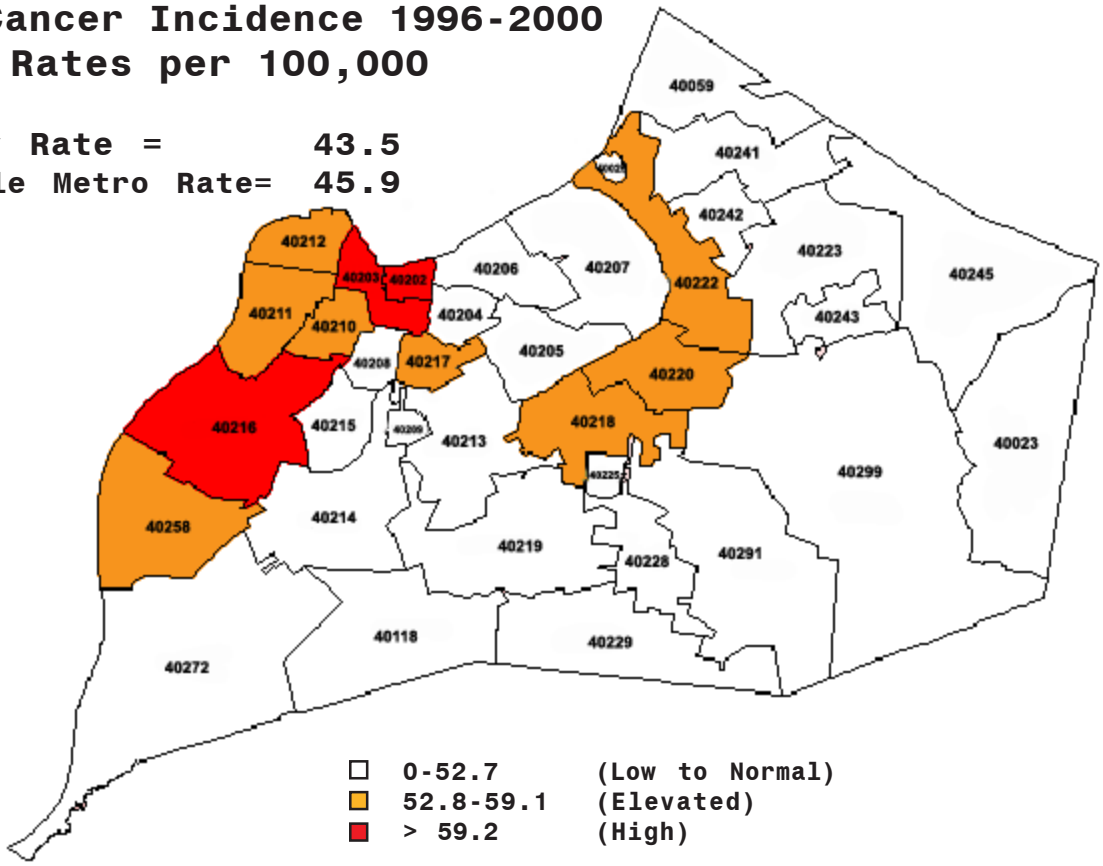


Prevalence of Smoking, 2000
BRFSS Special Survey
Louisville Metro Rate = 24.3%



Colon Cancer Incidence 1996-2000
Rates per 100,000

Kentucky Rate = 43.5
Louisville Metro Rate= 45.9

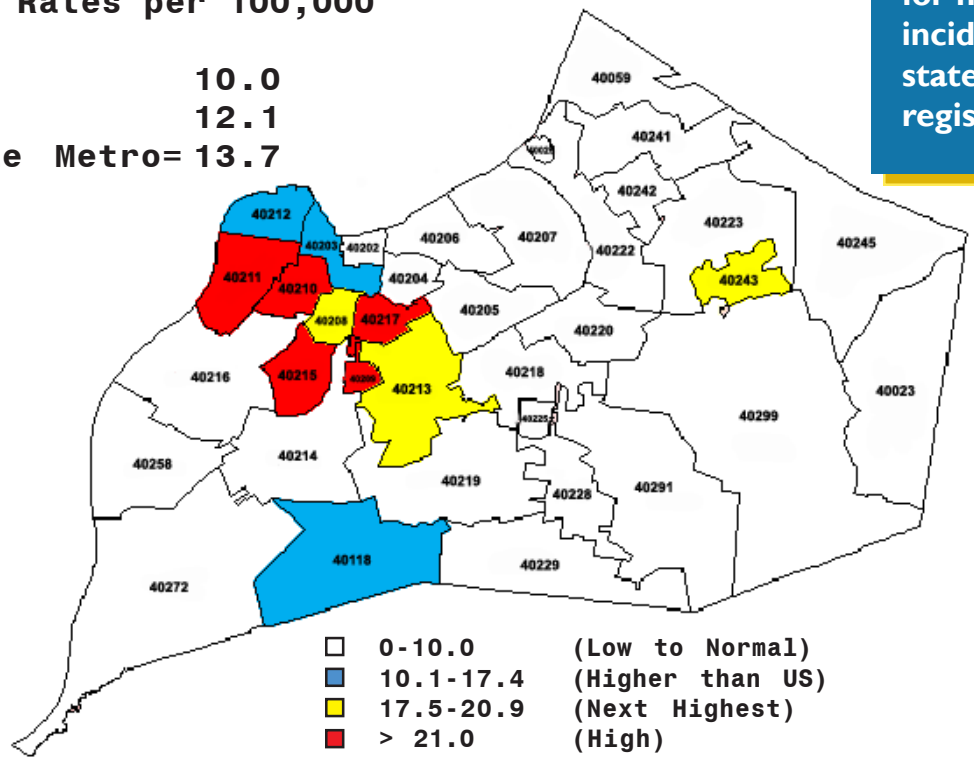


Colorectal and cervical cancers have encouraging survival rates, if screened and detected early. The incidence rates of Louisville Metro are slightly elevated over the state. Within the area, there are regions of higher rates that identify priority communities for disease control efforts.

CINA refers to another resource for national cancer incidence, from state-based cancer registries.

Cervical Cancer Incidence 1996-2000
Rates per 100,000

CINA= 10.0
KY= 12.1
Louisville Metro= 13.7



Environmental Cancer: Perspectives on Local Concerns

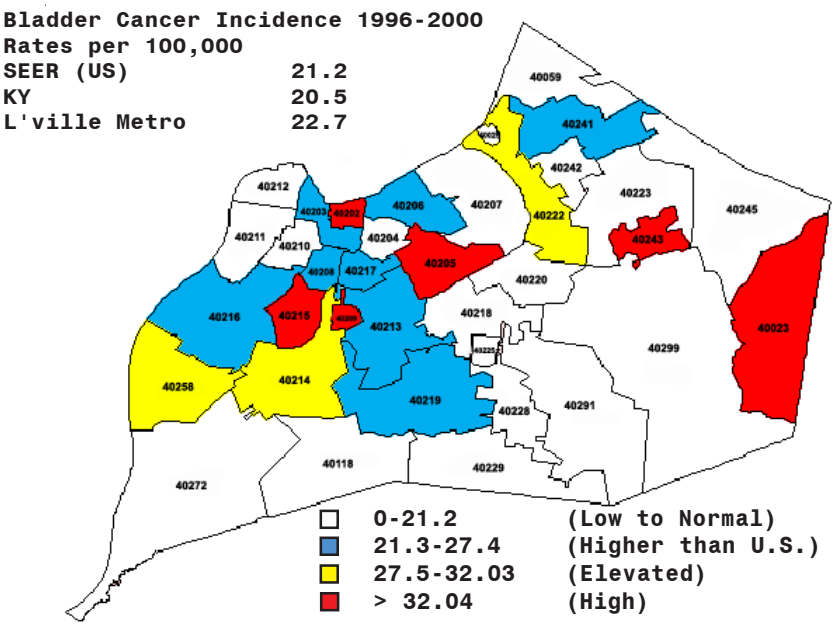
Several rare cancers are associated with environmental contamination. Bladder cancer, leukemia and pediatric cancer incidence data are presented here. Brain cancer and liver cancer rates were also studied but showed no remarkable pattern within Louisville Metro.

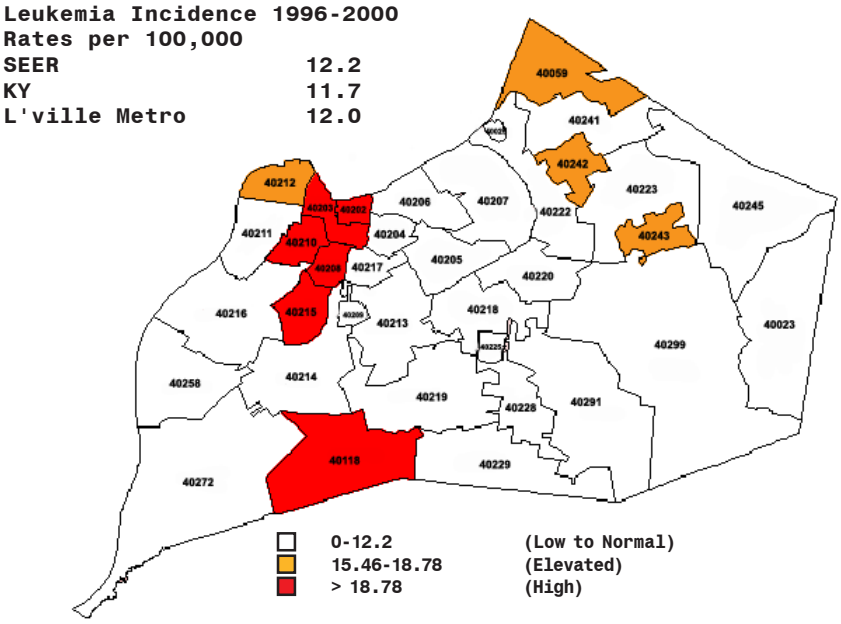
Bladder cancer incidence is slightly elevated over the rate for the nation or state. Within Louisville Metro, ZIP codes with elevated rates are not generally aggregated, suggesting that any disease risk is broadly dispersed throughout the region.

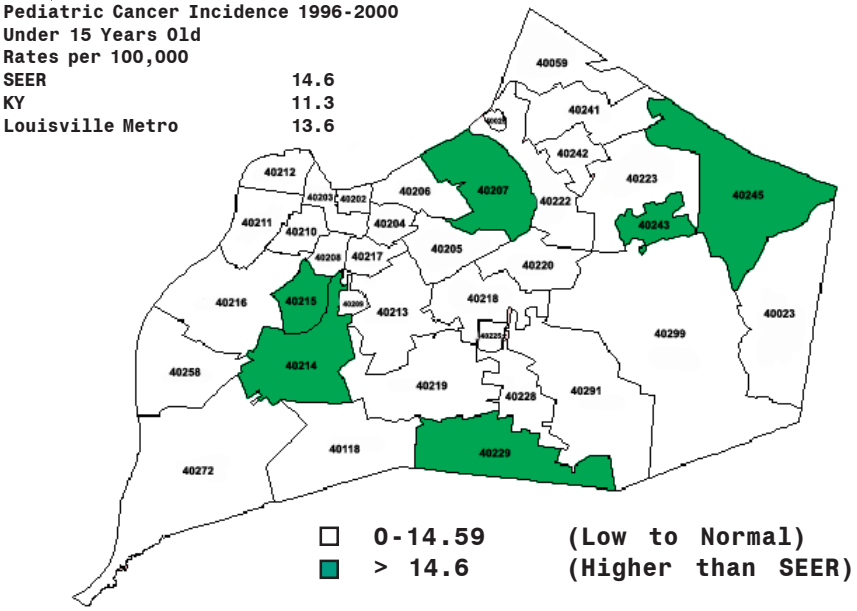
Metro leukemia rates are slightly lower than Kentucky and U. S. rates. Even though the elevated leukemia incidence rates are clustered, these suggest an inner city grouping, rather than one associated with local industries, for which there are concerns around ambient air emissions.

Pediatric cancer incidence rates are conspicuously lower in Louisville Metro and Kentucky compared to the nation. No evidence of elevated disease risk is found, and none suggests the presence of any "environmental" patterns.

These data underscore the evidence that if there are any environmental risks, they tend to cover a wide area, rather than being localized near specific industrial sites.







Technical Notes: The cancer incidence data presented in this report were analyzed in aggregate for the five-year period 1996-2000, and were age-adjusted to the U.S. 2000 population standard in a manner consistent with that used nationally. No race or gender adjustment has been made; although breast, prostate and cervical cancer data represented gender-specific analyses. The designation of 'high' rates was based upon the application of 95% confidence limits derived using a Poisson distribution. Secondary shadings were variable over the report, yet in most instances these were the rates exceeding one standard deviation above the state rate, but not two standard deviations. In several cases, comparisons were made with the referent national rates to illustrate the distinction between Kentucky specific rates as being higher or lower than national ones.

Questions regarding the manner and methods of the analysis may be directed to Dr. Tim Aldrich at the College of Public Health, University of Kentucky [859-257-5678, extension 82235]. His analysis methods and criteria are solely responsible for the content and format of this data presentation.

Resources:

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